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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/263,374	03/05/99	SLEATOR	M 14531.25

022913 TM02/0314
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EXAMINER

LEWIS, D

ART UNIT	PAPER NUMBER
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2673

DATE MAILED:

03/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

SPR

Office Action Summary

Application No.
09/263,374

Applicant(s)

Sleator

Examiner

David L Lewis

Group Art Unit
2673



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-36 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-36 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Title: Remote Control Device With Pointing Capacity

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
A person shall be entitled to a patent unless --
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
2. **Claims 1-36 are rejected under 35 U.S.C. 102(a) as being anticipated by Umeda et al. (6014129).**
3. **As in claim 1, Umeda et al** teaches of in a visual display system that includes a display screen, **figure 1 item 1**, a control box for controlling use of the display screen to display information, **column 4 lines 29-61**, wherein a main frame controls, and a hand held remote control device for selectively controlling the display of information on the display screen by transmitting data to the control box, **figure 1 item 3**, a method of generating a selected function on the display screen comprising the steps of: emitting a signal from a first location, **figure 1 item 0**; receiving the signal with the remote control device at a second location, **figure 1 item 3**, wherein the signal has an incident direction at the second location and the remote control device has a selected axis, **column 11 lines 1-35**; detecting an angular

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displacement between the incident direction of the signal and the selected axis of the remote control device, **column 11 lines 1-35, column 13 lines 7-18, figures 1 and 2**; transmitting data corresponding to the angular displacement to the control box, **column 2 lines 47-55, column 4 lines 28-43**; and generating the selected function on the display screen in response to the transmitted data, **column 2 lines 47-55**.

4. **As in claims 11 and 12, Umeda et al. teaches** of in a visual display system that includes a display screen, a control box for controlling use of the display screen to display information, and a hand held remote control device for selectively controlling the display of information on the display screen by transmitting data to the control box, a method of generating a selected function on the display screen, **column 2 lines 47-55, figure 1 and 2**, comprising the steps of: holding the remote control device at a first angular orientation, **figure 1 item 3**; receiving with the remote control device a signal generated at a first location separate from the remote control device, **figure 2 item 4**; transmitting first data corresponding to the first angular orientation from the remote control device to the control box, **column 11 lines 35-45**; generating a cursor on the display screen at a first position, **column 2 lines 47-55**; reorienting the remote control device to a second angular orientation, **column 25 lines 23-63**; receiving the signal with the remote control device, **column 25 lines 10-20**; transmitting second data corresponding to the second angular orientation from the remote control device to the

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control box, **column 25 lines 10-35**; and generating a cursor on the display screen at a second position, the second position being selected in response to an angular displacement between the first angular orientation and the second angular orientation, **column 6 lines 40-60, column 27 lines 5-25, figures 28 to 31.**

5. **As in claim 21, Umeda et al teaches of** in a visual display system that includes a display screen, a control box for controlling use of the display screen to display information, and a hand held remote control device for selectively controlling the display of information on the display screen by transmitting data to the control box, **column 2 lines 47-55, figure 1 and 2**, a method of generating a selected function on the display screen comprising the steps of emitting a signal consisting of electromagnetic radiation from a first location, **figure 1 item 2a**; projecting the signal onto the remote control device, wherein the signal has an incident direction at the remote control device and the remote control device has a selected axis oriented at an angular displacement from the incident direction, **figure 1 item 3**; projecting a first portion of the signal through a first substantially cylindrical lens, **figure 4 item 12a**, through a first filtering structure that selectively removes a first portion of the electromagnetic radiation from the first portion of the signal, **figure 4 item 11a**, and onto a first detector, **figure 4 item 5a,b**; projecting a second portion of the signal through a second substantially cylindrical lens, **figure 4 item 12b**, through a second filtering structure that selectively removes a second portion of the electromagnetic radiation from the second portion of the signal,

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figure 4 item 11b, and onto a second detector, **figure 4 item 5c,d**, wherein the first substantially cylindrical lens has a first longitudinal axis that is non-parallel with a second longitudinal axis of the second substantially cylindrical lens, **figure 4**; detecting a first amount of electromagnetic radiation within the first portion of the signal using the first detector, wherein the detected first amount is a function of a first component of the angular displacement measured about the first longitudinal axis, **column 12 lines 19-26**; detecting a second amount of electromagnetic radiation within the second portion of the signal using the second detector, wherein the detected second amount is a function of a second component of the angular displacement measured about the second longitudinal axis, **column 12 lines 19-26**; transmitting data corresponding to the detected first amount of electromagnetic radiation and the detected second amount of electromagnetic radiation to the control box, **column 11 line 35-47**; and generating a selected function on the display screen in response to the transmitted data, **column 11 lines 49-67**.

6. **As in claim 22, Umeda et al. teaches of** a moveable remote control device for use in a visual display system that includes a display screen and a control box electronically connected to the display screen, the moveable remote control device transmitting to the control box angular orientation information of the moveable remote control device so that a selected function may be generated on the display screen, **column 2 lines 47-55, column 10 lines 21-65**, the remote control device comprising: receiving means for receiving an electromagnetic signal emitted from a remote location, **figure 2 item**

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4, figure 4 item 4; orientation means for establishing an initial angular orientation of the remote control device, data corresponding to the initial angular orientation being transmitted from the remote control device to the control box, **column 12 lines 58-67, column 13 lines 7-25;** first means for measuring a first component of an angular displacement of the remote control device about a first axis and relative to the initial angular orientation, **column 12 lines 58-67, column 13 lines 7-25;** second means for measuring a second component of the angular displacement of the remote control device about a second axis and with respect to the initial angular orientation, the second axis being non-parallel with the first axis, **column 12 lines 58-67, column 13 lines 7-25, column 28 lines 48-58;** and transmitting means for sending data corresponding to the first component and the second component of the angular displacement to the control box, **column 11 lines 35-48.**

7. **As in claim 31, Umeda et al. teaches of a computer input system for controlling the location of a cursor on a display screen, figure 1 item 3, the computer input system comprising:** orientation means for establishing an initial angular orientation of a hand held remote control device, **column 13 lines 7-25;** first means for repeatedly detecting a variable first component of an angular displacement of the remote control device relative to the initial angular orientation by detecting an incident direction of an electromagnetic signal, wherein the first component of the angular displacement is measured about a first axis, **column 13 lines 7-25;** second means for repeatedly detecting a variable second component of the angular displacement of the remote control device by detecting the incident

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direction of the electromagnetic signal, wherein the second component is measured about a second axis that is non-parallel with the first axis, **column 13 lines 18-25**; transmitting means⁶ for sending data corresponding to the first component and the second component of the angular displacement, **column 11 lines 35-48**; and processing means for receiving the transmitted data and for generating a cursor on a display screen in response to the transmitted data, **column 11 lines 35-65**.

8. **As in claim 36, Umeda et al. teaches of** a computer input system for controlling the position of a cursor on a display screen, **figure 1 item 3**, the computer input system comprising: an emitter that emits an electromagnetic signal from a first location, **figure 6 item 2a**; and a remote control device having a selected axis that is oriented at an angular displacement from an incident direction of a portion of the electromagnetic signal that strikes the remote control device, **figure 4**, wherein the remote control device includes. - a first detector for detecting a first component of the angular displacement, the first component being measured relative to a first axis, **figure 4 item 5A**; and a second detector for detecting a second component of the angular displacement, the second component being measured relative to a second axis that is non-parallel to the first axis, **figure 4 item 5C**.

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9. **As in claim 2**, Umeda et al. teaches of said moving the input device and transmitting new data, column 27 lines 4-47, column 28 lines 59-66. **As in claim 3**, Umeda teaches of said filtering, column 18 lines 10-25. **As in claim 4-7**, Umeda et al. teaches of cursor movement based on measured displacement of input device, column 17 lines 55-67, column 13 lines 7-18, 48-65. **As in claims 8 and 9**, Umeda et a. teaches of said lens and aperture, figure 4 item 12a and 11a. **As in claim 10**, Umeda teaches of emitting from a second location, figure 6 item 2(a) (1 and 2), column 14 lines 65-67. **As in claim 18**, Umeda teaches of **said modulating signal, column 35-50**. **As in claim 19**, Umeda teaches of encoding data, column 18 lines 30-40. **As in claim 20**, Umeda teaches of said normalized signal, column 28 lines 1-5. Further Umeda et al also teaches of **claims 13-17, 23-30, and 32-35** as shown above in the subject matter related claims 1-12, 18-22, 31 and 36.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kim et al. (5892501), Odell (5574479), Fan (5926168).
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(703) 306-3026**. The examiner can normally be reached on MT and THF from 8 to 5. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on (703) 305-4938. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

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Or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Or hand-delivered to:

Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



**BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**

Examiner: David L. Lewis

March 12, 2001